

REMARKS

Claims 50-62 were rejected because certain claim elements lacked correspondence in the figures. In order to expedite prosecution, Claims 50-62 have been cancelled and replaced by new Claims 63-77.

For the Examiner's convenience, the following is a sample list from the new claims with reference to the drawings in parentheses. These are exemplary references only and not intended to limit the scope of any claim.

63. (New) A light communication device comprising:

- a detecting means (physiological function assisting means ((1) in Fig. 1) for detecting an internal state of a living body and for generating a signal representing the detected state;

- a transmitting means (11) for transmitting light whose polarization state is modulated on the basis of the signal;

- a receiving means (22) for receiving and demodulating the light to extract the signal included in the light; and

- a controlling means (external control means (2)) for receiving the extracted signal.

64. (New) A light communication device comprising:

- a controlling means (external control means (2)) for generating a control signal;

- a transmitting means (21) for transmitting light whose polarization state is modulated on the basis of the control signal;

- a receiving means (22) for receiving and demodulating the light to extract the control signal included in the light; and

- a physiological function assisting means (1) for assisting a function of a living body on the basis of the control signal.

65. (New) The light communication device of Claim 63, wherein the transmitting means comprises a planar emission laser (see Fig. 4).

67. (New) The light communication device of Claim 63, wherein the transmitting means comprises:

- a light source comprising a plurality of planar emission laser diodes formed on a semiconductor substrate, each of which having a different direction of polarization; and

- driving means (see Fig. 9) for driving selectively the plurality of planar emission lasers.

69. (New) The light communication device of Claim 63, further comprising a display unit (see Fig. 12) that displays information regarding a living body on the basis of the extracted signal.

70. (New) The light communication device of Claim 63, further comprising a holding means (see Fig. 21) for holding the detecting means in a position to detect light transmitted by the transmitting means.

71. (New) A light communication system for performing communication between a physiological function assisting device (1) and a controlling device (2), the system comprising:

in the physiological function assisting device (1),

means (1) for detecting an internal state of a living body and generating a data signal representing the detected state;

a first transmitting means (11) for transmitting light whose polarization state is modulated on the basis of the detected data signal;

a first receiving means (12) for receiving and demodulating light transmitted by said controlling means to extract a control signal included in the light;

in the controlling device (2),

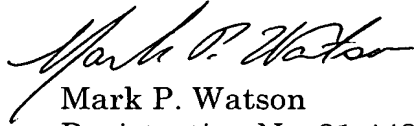
means (2) for generating the control signal;

a second transmitting means (21) for transmitting light whose polarization state is modulated on the basis of the control signal; and a receiving means (22) for receiving and demodulating light transmitted by said physiological function assisting device, to extract the data signal included in the light.

Each of the independent claims recites features that are neither disclosed nor suggested in the prior art. Namely, neither modulating a polarization plane of transmitted light on the basis of a signal input at a transmitter nor demodulating a polarization state of received light into a signal at a receiver, as carried out in the present invention, are disclosed in Sakanaka or Funke. These references are discussed in detail with respect to the specifically recited features of the present invention in Amendment A filed October 17, 2002, which discussion is incorporated herein by reference.

In view of the foregoing amendments and remarks, Applicants respectfully request favorable reconsideration of the present application.

Respectfully submitted,



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